



Installation and Operation Instructions ACI/RH TUCH LCD Room Unit

GENERAL INFORMATION

The ACI/RH TUCH LCD Room Unit is factory-configured to support your specific requirements.

CAUTION

- CHECK THAT THE ACI/RH TUCH LCD ROOM UNIT IS CORRECTLY CONFIGURED FOR THE APPLICATION; CONTACT ACI IF YOU ARE UNSURE.
- THE ACI/RH TUCH LCD ROOM UNIT IS A PRECISION INSTRUMENT; PLEASE HANDLE IT WITH CARE!

MOUNTING INSTRUCTIONS

Separate the cover from the base. Attach the base directly to drywall, or to a standard 2" x 4" junction box using the mounting hardware provided. Refer to the wiring instructions to make the necessary connections. After wiring, attach the cover to the base and turn the (2) hex-screws at the bottom of the base until the cover cannot be removed.

WARNING

- REMOVE POWER BEFORE WIRING! NEVER CONNECT OR DISCONNECT WIRING WITH POWER APPLIED. DO NOT ALLOW LIVE WIRES TO TOUCH THE CIRCUIT BOARD!

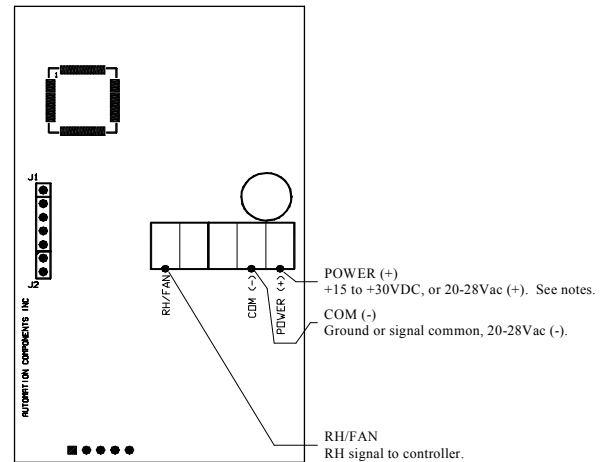
CAUTION

- WIRING MUST COMPLY WITH APPLICABLE LOCAL AND NATIONAL ELECTRICAL REGULATIONS.
- DO NOT RUN THE ACI/RH TUCH LCD ROOM UNIT WIRING IN ANY CONDUIT WITH MAINS POWER SYSTEM WIRING.
- ACI RECOMMENDS USING A SEPARATE UL-LISTED CLASS 2 TRANSFORMER WHEN POWERING THE ACI/RH TUCH LCD ROOM UNIT WITH 24VAC! FAILURE TO WIRE DEVICES WITH THE CORRECT POLARITY WHEN USING A SHARED TRANSFORMER MAY RESULT IN DAMAGE TO ANY DEVICE POWERED BY THE SHARED TRANSFORMER.

WIRING INSTRUCTIONS

The number of wires needed to connect the ACI/RH TUCH LCD Room Unit to a controller depends on the application. Most applications require three wires to support the RH output, power, and ground (common). All signals are common ground referenced. **ACI recommends 16-22 AWG twisted pair wires or shielded cable for all sensor installations. Be sure to connect the cable shield to the ground at the controller ONLY.**

WIRING DIAGRAM



NOTES:

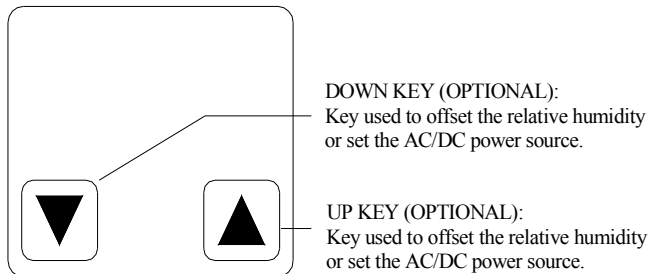
1. If the ACI/RH TUCH LCD Room Unit has any output configured as 0-10V or 2-10V, the voltage at the POWER(+) terminal must be at least +18VDC.



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USER OPTIONS

If the ACI/RH TUCH LCD Room Unit has a two button keypad shown below, the unit can be configured to offset the relative humidity and set AC or DC power source.



Note: If the DOWN or UP key is pressed, the display will switch to a setpoint mode. This mode is not enabled and will not affect the operation of the ACI/RH TUCH LCD Room Unit. The display will switch back to normal operation after approximately 5 seconds.

RELATIVE HUMIDITY OFFSET

While the ACI/RH TUCH LCD Room Unit is displaying the relative humidity, press and hold the DOWN and UP keys at the same time. The display will continue to show the relative humidity while both keys are pressed. After approximately 30 seconds, the display will change to show 100 where the relative humidity is normally displayed. Once the 100 is displayed, stop pressing the DOWN and UP keys. The 100 on the display indicates successful entry into the options page mode.

Press the UP key until 106 is displayed. Then press the DOWN key to enter the relative humidity offset mode. The current relative humidity offset is now displayed. Press the UP key until the desired offset is displayed. Refer to the chart on the next page to find the right setting. The UP key will increment through the option values and reset to 00 after 20 is reached. To get out of the relative humidity offset mode press the DOWN key.

To return to normal operation from the option page mode, press the UP key until the display shows 1--. Press the DOWN key to return to normal operation. If no key is pressed for approximately 10 seconds while in the option value mode, the ACI/RH TUCH LCD Room Unit will automatically return to normal operation. If no key is pressed for approximately 30 seconds while in the option page mode, the ACI/RH TUCH LCD Room Unit will automatically return to normal operation.

AC/DC POWER SOURCE SELECTION

For better accuracy the ACI/RH TUCH LCD Room Unit should be adjusted for an AC or DC power source when using 4-20mA output. Voltage output does not require an offset.

Refer to the label on the ACI/RH TUCH LCD Room Unit to determine what power source the unit is set up in. The unit will be factory preset depending on what power source is ordered. If the factory preset does not match the application, an adjustment should be made.

While the ACI/RH TUCH LCD Room Unit is displaying the relative humidity, press and hold the DOWN and UP keys at the same time. The display will continue to show the relative humidity while both keys are pressed. After approximately 30 seconds, the display will change to show 100 where the relative humidity is normally displayed. Once the 100 is displayed, stop pressing the DOWN and UP keys. The 100 on the display indicates successful entry into the options page mode.

Press the UP key until 106 is displayed. Then press the DOWN key to enter the relative humidity offset mode. The current relative humidity offset is now displayed. If the ACI/RH TUCH LCD Room unit is set up for an AC power source and a DC power source is being used, press the UP key until 06 is displayed. If the ACI/RH TUCH LCD Room Unit is set up for a DC power source and an AC power source is being used, press the up key until 14 is displayed. The UP key will increment through the option values and reset to 00 after 20 is reached. To get out of the relative humidity offset mode press the DOWN key.

To return to normal operation from the option page mode, press the UP key until the display shows 1--. Press the DOWN key to return to normal operation. If no key is pressed for approximately 10 seconds while in the option value mode, the ACI/RH TUCH LCD Room Unit will automatically return to normal operation. If no key is pressed for approximately 30 seconds while in the option page mode, the ACI/RH TUCH LCD Room Unit will automatically return to normal operation.



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PAGE	DESCRIPTION
106	Relative Humidity Offset
	00 = -5.0%
	01 = -4.5%
	02 = -4.0%
	03 = -3.5%
	04 = -3.0%
	05 = -2.5%
	06 = -2.0%
	07 = -1.5%
	08 = -1.0%
	09 = -0.5%
	10 = 0.0% (Default)
	11 = +0.5%
	12 = +1.0%
	13 = +1.5%
	14 = +2.0%
	15 = +2.5%
	16 = +3.0%
	17 = +3.5%
	18 = +4.0%
	19 = +4.5%
	20 = +5.0%